# AN ENERGY GUIDE FOR NEVADA CONSUMERS



Easy Steps to Saving Money and Breathing Cleaner Air

E very time you flip on a light switch, open the refrigerator door or adjust the thermostat, you're using energy. The problem is that a lot of the money you spend each month on energy is wasted. Inefficient appliances, leaky windows, inadequate insulation and the ways you use energy can add hundreds of dollars to your utility bill each year. The good news is that by investing in energy-efficient products, you can live more comfortably and save up to 30% (or even more!) on your energy bills.

**Energy Fact:** Thanks to new technology, the average home refrigerator will soon use only as much energy as a 75-watt light bulb that runs continuously!



Energy is more than an economic issue. It's a health issue, too, since the quality of the air you breathe is determined by the energy that you use. Burning fossil fuels for your home's energy actually puts more harmful pollutants into the air than does your car! Energy efficiency and renewable energy can help reduce emissions of greenhouse gases, thought to be responsible for global climate change. Your energy choices <u>can</u> make a difference.

<u>Nevada utility companies rely heavily on fossil fuels and other non-renewable sources to produce electricity in our state.</u> Nevada is second in per capita electricity generation from renewable resources (excluding hydroelectric).

The American Cancer Society and the Harvard School of Public Health have estimated that more than 64,000 Americans die prematurely each year because of exposure to fine particles in the air. These toxic substances are largely produced by conventional energy sources.

What does this all mean for Nevada? We need to use renewable energy and energy-efficient technologies in Nevada now! Increasing our use of these cost-effective resources will save money, create jobs, strengthen our economy and dramatically improve the quality of the air we breathe. Looking to the future, it is clear that our economic and personal well-being will depend on energy sources that are reliable, cost-effective, and that emit fewer pollutants than today's mix does.



### **ENERGY EFFICIENCY:**

#### The Easy Way to Protect Your Pocketbook and Your Air Quality

Last year, we spent more than \$3.1 billion for energy in Nevada. Even though people have been using energy more wisely in recent years, our country is still importing more than 52 percent of our oil supply. Experts say that without changes, we are on our way to importing 60 percent of our oil by the year 2010.

There are lots of things you can do <u>now</u> to save money in your home. Products like energy-efficient windows, appliances, lighting and high-performance insulation pay for themselves in energy savings in a short period of time. In fact, Nevada residents can cut monthly utility bills by 47% just by using *Energy Star* to equipment and other efficiency upgrades. Look for the *Energy Star* to label when buying products.

One of the easiest, most cost-effective investments you can make is to install compact fluorescent light bulbs. You'll save 3/4 of the energy you use now for lighting (that's an annual saving of \$110 for the average U.S. homeowner), plus each bulb saves enough electricity to displace 662 pounds of coal or 62 gallons of oil.

Everyone benefits from savings like this!

Energy Fact: Energy-efficient mortgages and other incentives are offered around the country to buyers whose houses are efficient, because lenders know the money saved on energy can go toward other household and family needs.

The amount of energy wasted through poorly insulated windows and doors alone is about as much energy as we get annually from the Alaskan pipeline!

Solar, wind, and other energy sources that don't run out are called "renewable" energy. Technology advances in recent years have made renewable energy systems cost-effective, reliable, and virtually maintenance-free. Today's systems are protected by extensive warranties that guarantee they'll save you energy and money! In fact, many systems have lifetimes of 15 to 20 years or even more.

The same solar technology used to power satellites and spacecraft is available for your home at an affordable price now! You're already familiar with simple solar cells used to power calculators. Larger systems using these cells - called photovoltaics - are providing power for use around the state,

ranging from outdoor lighting on homes to water pumping on farms, supplemental power in major cities, and even energy for entire homes in remote rural areas.

Nevada state law encourages renewables by subtracting the value added by solar, wind, geothermal and other renewable systems from the home's assessed tax value.



Solar water heating systems can be found on the roofs of many homes around the state. The \$3,500 or so spent on a home solar water heating system typically saves enough energy to pay back the full purchase price in about 7 years and then gives you another 10 to 15 years of absolutely free hot water.

A study on the energy future of Nevada and five nearby states found that the region will need 15,000 more megawatts of energy by 2015 — enough to power six cities the size of Denver! Increased uses of energy efficiency and renewable energy to meet this demand could lower energy costs by more than \$2 billion and cut major pollutants by 40%.

**Energy Fact:** Using renewable energy along with energy efficiency can easily cut our country's energy bill by as much as 75% — saving each of us more than \$800 per year in energy costs.

Whether you choose to buy energy-efficient products or to increase your use of power from renewable energy sources, you make Nevada a better place and help ensure a cleaner world for the future. You'll put more money into your pocket each month while making the air cleaner for you and your family.



## **WANT TO KNOW MORE?**

#### **Here's the Information to Get You Started**

The next step is in your hands. Here are the names of some local and national groups that support energy-efficiency, renewable energy, and clean air. Contact them for more information.

Nevada State Energy Office, 1050 East Williams Street, Suite 435, Carson City, NV 89710. (702) 687-5975 SunRise, 2239 Lakeshore Drive, Carson City, NV 89704. (702) 267-2311 Solar Energy Research and Education Foundation, P.O. Box 1036, Washington, D.C. 20013. (202) 383-2600 Energy Efficiency and Renewable Energy Clearinghouse, (800) 363-3732

Nevada State Energy Office: www.state.nv.us/b&i/eo U.S. Department of Energy: www.doe.gov

U.S. Environmental Protection Agency: www.epa.gov

Alliance to Save Energy: www.ase.org Solar Energy Industries Association: www.seia.org

Center for Renewable Energy and Sustainable Technology: www.crest.org

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